

AMENDMENTS TO THE SPECIFICATION:

The Abstract should be amended and replaced as follows:

An improved wireless mobile IP system including an apparatus and method for managing transmission of information. Agent advertisements are used to detect movement of the mobile node and derive care-of addressing information for the Home Agent. Foreign Agents and Home Agents currently periodically broadcast an agent advertisement on the data channel. The claimed system reduces the need for agent advertisements by detecting movement of a mobile user into a new network using either the mobile node or a routine on a low-level protocol layer. After detection of movement, an agent solicitation message is transmitted from the mobile node or from the cell-site transmitter. The mobility agent then transmits a single agent advertisement in response. Derived care-of addressing information will then be registered with the Home Agent to support "tunneling" of communications to the mobile node through the foreign network. Transmission of agent advertisements and associated non-data traffic on the data channels will be reduced.